

Date: Wed, 23 Mar 94 04:30:13 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V94 #320
To: Info-Hams

Info-Hams Digest Wed, 23 Mar 94 Volume 94 : Issue 320

Today's Topics:

 25_years_of-portable-phone
 Best cars for mobile HF/VHF
 DTMF tone gereation source code/Sbalster
 Grounding and lightning protection--KE4ZV
 Info on Slovakian hams
 Info Req. OMEGA SYSTEM
 IPS Daily Report - 22 March 94
 Jeff Herman wins the Net Nazi award.
 Need Dayton room

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 23 Mar 94 11:50:59 GMT
From: news-mail-gateway@ucsd.edu
Subject: 25_years_of-portable-phone
To: info-hams@ucsd.edu

Dave Sweigert <sweigert@wrtfac.udev.cdc.COM> wrote:

>

>George Sweigert, now 74, licensed as N9LC since 1975 and formerly
>W8ZIS, was granted a patent in June, 1969 for a wireless portable
>telephone device. The specific patent claim was for "full duplex
>radio communications".

>

Sorry to put a damper on things, but there was full-duplex portable

kit around well before this! Specifically, the 'S-phone' that was used extensively during WWII. Various models existed, the usual one was a 2-tube super-regen receiver [Acorn-type tubes, RCA 954's if i remember correctly] and matching 2-tube self-oscillating transmitter [no xtals]. It fitted in a chest-mounted box, which had a dipole sticking out the front , and dry batteries in a waist-mounted harness; working around 400MHz, with the transmit and receive frequencies staggered by several tens of megahertz.

This thing could be hooked into the PSTN if need be [but it needed a control operator at the PSTN/radio interface; the S-phone made no provision for call establishment or disconnection] but it was generally used to coordinate air-drops of supplies to resistance groups. It could even be used as a homing beacon for the air-crew to find the drop zone.

There was also full-duplex VHF air-to-air stuff being used by fighter pilots during WWII, again using self-oscillating transmitters and super-regenerative 'rush box' receivers. Some even used a carrier-operated relay as a form of squelch.

Also, I believe Motorola had some full-duplex kit pre-WWII, but whether or not this was a commercial product [rather than a technology demonstration] i dont know. I remember reading an article about it, saying it was the first commercial use of 'acorn' tubes.

Peter J.M. Lucas NERC Computer Services Swindon England
pjml@swmis.nsw.ac.uk or pjml@uk.ac.nsw.swmis or g6wbj@gb7sdn.gbr.eu
"I dont care if you drive at 120MPH, as long as you pull over to let me pass"

Date: 23 Mar 94 10:24:25 GMT
From: news-mail-gateway@ucsd.edu
Subject: Best cars for mobile HF/VHF
To: info-hams@ucsd.edu

Probably best to go for 'low-tech' solutions if you are after a radio-quiet environment; the fewer microprocessors etc. you have, the less likely you are to get hit by clock oscillator harmonics etc. Count the number of microprocessors in use; the more there are, the greater the risk of problems!

Many auto companies produce 'special pack' models for use by the Police etc; these often come fitted with radio-desirable options [like a bigger alternator, larger battery, proper interference-filtering and pre-installed power take-off terminals] as well as uprated brakes and suspension; you may find a lower level of trim finish, and fewer 'gizmos' though. I used to have an ex-Police Range Rover [the 'Fleetline' model] which had a 120-amp alternator, twin batteries etc. but only rubber mats on the floor.

Even Diesels have their problems; apart from being pitifully slow, they may have electronics to control turbos, injection timing, transmission shift, anti-lock brakes etc etc.

Peter J.M. Lucas NERC Computer Services Swindon England
pjml@swwmis.nsw.ac.uk or pjml@uk.ac.nsw.swwmis or g6wbj@gb7sdn.gbr.eu
"I do not care if you drive at 120MPH, as long as you pull over to let me pass"

Date: 18 Mar 94 01:14:23 GMT
From: news-mail-gateway@ucsd.edu
Subject: DTMF tone gereation source code/Sbalster
To: info-hams@ucsd.edu

(*
To All hams interested.

I said a long time ago that I would release this source code. Well, here it is! It does work rather well, and in fact, better than the phone! I am currently developing a ** FREE ** repeater controller package around this idea, along with voice mail and the like, but, I am in need of some more assistance. Is anyone interested in helping me out with some ideas? I just need a jump start, and I would prefer to have some source assembler code for another repeater controller.

Not too long ago, I saw such a program, but lost it (and the BBS is down!)
Please, if you can help me out, drop me a line via the internet address given below (It is hard for me to read this newsgroup; just send me a note).

Thanks,
Jim (N9IE0)
internet: jjacobse@siucvmb.siu.edu

DTMF Touch Tone Generator
Written by: Jim Jacobsen (N9IE0) (jjacobse@siucvmb.siu.edu)
This program uses the Sound Blaster FM chips to generate Touch Tones

*)

```

Unit SBlaster;
Interface
Uses Dos;

Procedure Generate_tone(c1,c2: word);
Procedure Release_tone;
Procedure touchtone(c: char);
implementation

Const
tns: array 1..8 of word = (920,1019,1586,1640,1824,1905,2004,2590);

Var
r1,r2: word;

(* This is an internal function to write a tone to the adlib/sound
blaster card *)

Procedure Writeport(reg,val: word);
var i,c: word;
Begin
port $388 :=reg;
for i:=1 to 12 do c:=port $388 ;
port $389 :=val;
for i:=1 to 30 do c:=port $388 ;
end;

Procedure Generate_tone(c1,c2: word);
Begin

writeport($b3,$2f); writeport($b4,$2f);
writeport($e0,0); { Set Wave for voice 1 }
writeport($e1,0); { Voice 2 }
writeport($c0,1); { Use Additive Synthesis }
writeport($c1,1);
writeport($20,1); { Multiple - 1 }
writeport($21,1);
writeport($40,$1); { Level - 0 Highest }
writeport($41,$1);
writeport($60,$f0); { Attack / Decay }
writeport($61,$f0);
writeport($80,$Ff); { Sustain / Release }
writeport($81,$Ff);
writeport($a0,c1 and $ff); { Note
}
writeport($a1,c2 and $ff);
writeport($b0,$30 or (c1 shr 8)); { Note on, Octave }
writeport($b1,$30 or (c2 shr 8));

```

```
r1:=c1 shr 8; r2:=c2 shr 8;
end;
```

```
(* This procedure silences the tones *)
```

```
procedure release_tone;
Begin
writeport($b0,r1);
writeport($b1,r2);
end;
```

```
(* This procedure is used to generate DTMF tones, use the valid DTMF
digits *)
```

```
procedure touchtone(c: char);
var
w1,w2: word;
```

```
Begin
c:=upcase(c);
if c in '0'..'9','A'..'D','
','*' then
begin
case c of
'1','4','7','*': w1:=tns 5 ;
'2','5','8','0': w1:=tns 6 ;
'3','6','9','
': w1:=tns 7 ;
'A'..'D':      w1:=tns 8 ;
end;
case c of
'1','2','3','A': w2:=tns 1 ;
'4','5','6','B': w2:=tns 2 ;
'7','8','9','C': w2:=tns 3 ;
' ','0','
','D': w2:=tns 4 ;
end;
generate_tone(w2,w1);
end;
end;

end.
```

```
-----
```

```
Date: Wed, 23 Mar 1994 09:14:57 GMT
From: ihnp4.ucsd.edu!usc!elroy.jpl.nasa.gov!ncar!csn!col.hp.com!srngenprp!
news.dtc.hp.com!hplextra!hplb!hpwin052!hpmqmoa!dstock@network.ucsd.edu
```

Subject: Grounding and lightning protection--KE4ZV
To: info-hams@ucsd.edu

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

: strike is a constant current source. So if we take a single driven
: ground rod as having a resistance of 230 ohms, we can assume that
: the power delivered to the rod in a stroke is $I^2 \cdot R$ or 3.68E9 watts.
: Converting that to energy, we have $3.68E9 \cdot 20 / 4000 = 18.4E6$ watt-seconds,
: or 5.11 kW-hr. That's 18.396 Megajoules.

: Gary

That sounds much more like the kind of numbers I wouldn't want to be
anywhere near !

The ground rod itself will be a small fraction of the resistance and
so get a small fraction of the energy, it will be the ground around the
rod that takes the brunt. Instant steam explosion?

Cheers

David GM4ZNX

Date: 23 Mar 94 05:18:27 GMT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!news.cac.psu.edu!news.pop.psu.edu!
ctc.com!birdie-blue.cis.pitt.edu!godot.cc.duq.edu!toads.pgh.pa.us!w2xo!
durham@network.ucsd.edu
Subject: Info on Slovakian hams
To: info-hams@ucsd.edu

I include packet mail from a local ham who is looking for info
on Slovakian ham radio...

>From N3JHA%K30IW.#WPA.PA.USA.NA@w2xo.pgh.pa.us Tue Mar 22 22:40:32 1994
>To : W2XO@W2XO.#SWPA.PA.USA.NOAM

>Hi Jim,
>Last Tuesday, Bud WA3JPJ visited my shack and after telling him of my troubles
>contacting the Slovak Republic. He thought of you and we sent a message from my
>machine to you asking for information in contacting Slovakia. Since then,
>the home board K30IW has been up and down, so I'm not sure if you received
>the original message, or if maybe your reply was lost so I am sending
>a follow-up. My wife is from what is now Slovakia, OM3 land and we will
>be visiting there this summer. I am taking a HF station for my brother-
>in-law and need to find out if I can buy a Power Supply there or if I
>need to take one. Thanks in advance for your help.

>73 Duffy N3JHA @ K30IW.WPA.PA.USA.NA
>sk

If you can help him, you can mail to him as
N3JHA%K30IW.#WPA.PA.USA.NA@w2xo.pgh.pa.us .

This will gateway it through to packet.

Thanks,
Jim Durham, W2X0

Date: Tue, 22 Mar 1994 13:37:03 -0500
From: ihnp4.ucsd.edu!news.acns.nwu.edu!ftpbox!mothost!lmpsbbs!NewsWatcher!
user@network.ucsd.edu
Subject: Info Req. OMEGA SYSTEM
To: info-hams@ucsd.edu

In article <Cn14u7.MBD@cscsun.rmc.edu>, dtiller@cscsun.rmc.edu (David
Tiller) wrote:

> Bruno Mabboux (mabboux@vcnam.cnam.fr) wrote:
>
>
> : Hi!
>
> : I need regular information on the OMEGA SYSTEM ,
> : (10 kHz world wild interferometric radio localization network).
>
> : Where can I obtain information, as like on/off station/channel activity
> : or power modification .
>
> : Thanks for advance .
>
> : Bruno Mabboux .
>
> I think the NIST has an anonymous ftp site (or perhaps a gopher server) with
> stuff like that on it.
>
> --
> David Tiller | Network Administrator | Voice: (804) 752-3710 |
> dtiller@rmc.edu | Randolph-Macon College | Fax: (804) 752-7231 |
> "Drunk, [Beowulf] slew | P.O. Box 5005 | ICBM: 37d 42' 43.75" N |
> no hearth companions." | Ashland, Va 23005 | 77d 31' 32.19" W |

You can also try sci.geo.satellite-nav and they will either answer or point you toward some other ftp sites that have what you need.

--

Karl Beckman, P.E. < STUPIDITY is an elemental force for which >
Motorola Comm - Fixed Data < no earthquake is a match. -- Karl Kraus >

The statements and opinions expressed here are not those of Motorola Inc. Motorola paid a marketing firm a huge sum of money to get their opinions; they have made it clear that they do not wish to share those of employees.

Amateur radio WA8NVW @ K8MR.NEOH.USA.NA NavyMARS VBH @ NOGBN.NOASI

Date: Tue, 22 Mar 1994 23:42:53 GMT
From: ihnp4.ucsd.edu!munnari.oz.au!newshost.anu.edu.au!sserve!usage!metro!ipso!
rwc@network.ucsd.edu
Subject: IPS Daily Report - 22 March 94
To: info-hams@ucsd.edu

SUBJ: IPS DAILY SOLAR AND GEOPHYSICAL REPORT
ISSUED AT 22/2330Z MARCH 1994 BY IPS RADIO AND SPACE SERVICES
FROM THE REGIONAL WARNING CENTRE (RWC), SYDNEY.
SUMMARY FOR 22 MARCH AND FORECAST UP TO 25 MARCH

No warning is current.

1A. SOLAR SUMMARY
Activity: very low

Flares: none

Observed 10.7 cm flux/Equivalent Sunspot Number : 091/036

1B. SOLAR FORECAST

	23 March	24 March	25 March
Activity	Very low	Very low	Very low
Fadeouts	None expected	None expected	None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 090/034

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY

Geomagnetic field at Learmonth: unsettled to active, with brief minor storm period 12-15UT.

Estimated Indices :	A	K	Observed A Index 21 March
Learmonth	21	4333 5423	
Fredericksburg	17		22
Planetary	20		27

Observed Kp for 21 March: 3644 4443

2B. MAGNETIC FORECAST

DATE	Ap	CONDITIONS
23 Mar	20	Unsettled, with possible active periods.
24 Mar	15	Quiet to unsettled.
25 Mar	15	Quiet to unsettled.

2C. MAGNETIC COMMENT

None.

3A. GLOBAL HF PROPAGATION SUMMARY

DATE	LATITUDE BAND		
	LOW	MIDDLE	HIGH
22 Mar	normal	fair-normal	fair-normal

PCA Event : None.

3B. GLOBAL HF PROPAGATION FORECAST

DATE	LATITUDE BAND		
	LOW	MIDDLE	HIGH
23 Mar	normal	normal	normal
24 Mar	normal	normal	normal
25 Mar	normal	normal	normal

3C. GLOBAL HF PROPAGATION COMMENT

NONE.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY

MUFs at Sydney were 15-20% depressed until 10UT, near normal thereafter.

Observed T index for 22 March: 18

Predicted Monthly T Index for March is 40.

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST

DATE	T-index	MUFs
23 Mar	40	Near predicted monthly values.

24 Mar 40 Near predicted monthly values.
25 Mar 40 Near predicted monthly values.

4C. AUSTRALIAN REGION COMMENT

None.

--

IPS Regional Warning Centre, Sydney	IPS Radio and Space Services
email: rwc@ips.oz.au fax: +61 2 4148331	PO Box 5606
RWC Duty Forecaster tel: +61 2 4148329	West Chatswood NSW 2057
Recorded Message tel: +61 2 4148330	AUSTRALIA

Date: Wed, 23 Mar 94 06:32:55 GMT
From: netcomsv!netcomsv!skylld!jangus@decwrl.dec.com
Subject: Jeff Herman wins the Net Nazi award.
To: info-hams@ucsd.edu

In article <2mnc9q\$ah@network.ucsd.edu> brian@nothing.ucsd.edu writes:

```
> jangus@skylld.grendel.com (Jeffrey D. Angus) writes:
> >Jeff Herman attempting to intimidate me writes:
>
> If the two of you don't shut up I'm going to start cancelling your messages.
>
> We're all goddamn tired of this pissing contest. Go away if you can't
  ^^^^^
> be useful contributors.
>
> Ironical that *I* should be saying this.
> - Brian
```

Take a valium and chill out Brian. Ironical indeed. Why not do us all a favor and cancel all the pissing, moaning and baseless whining over on rec.radio.amateur.policy while you're at it.

Besides, who appointed you the moderator for the news group?

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA	"You have a flair for adding
Internet: jangus@skylld.grendel.com	a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749	story."
Phone: 1 (310) 324-6080	Peking Noodle Co.

Date: 22 Mar 1994 23:09:44 -0500
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!news.intercon.com!udel!
news.udel.edu!brahms.udel.edu!not-for-mail@network.ucsd.edu
Subject: Need Dayton room
To: info-hams@ucsd.edu

Please forgive the cross posting if you will.

I need a room for two for Thursday, Friday and Saturday night at Dayton.
We have one room at the Hampton House with the FRC, and want one more
closeby if possible.

CU at contest forum and dinner, FRC suite, hamfest etc.

Tnx Bob

--
Bob Penneys, WN3K Frankford Radio Club Internet: penneys@pecan.cns.udel.edu
Work: Ham Radio Outlet (Delaware) (800) 644-4476; fax (302) 322-8808
Mail at home: 12 East Mill Station Drive Newark, DE 19711 USA

Date: Wed, 23 Mar 94 09:32:08 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!pipex!uknet!uos-
ee!ee.surrey.ac.uk!M.Willis@network.ucsd.edu
To: info-hams@ucsd.edu

References <16F7AA3A6S85.M14494@mwvm.mitre.org>, <CMrFLs.G8u@oasis.icl.co.uk>,
<763839799snz@g8sjp.demon.co.uk>surr
Subject : Re: 2 meter use in London, England?

In article <763839799snz@g8sjp.demon.co.uk>, ip@g8sjp.demon.co.uk (Iain Philipps)
writes:

|> In article <CMrFLs.G8u@oasis.icl.co.uk>
|> prs@oasis.icl.co.uk "Peter Swynford" writes:
|>
|> > well if you guys stopped funding the IRA, the airport would be a bit
|> > safer....
|> >
|>
|> [assorted drive1 deleted]
|>
|> > 73 G0PUB
|> > Peter.
|>
|> I tried *very* hard to find a 'smiley' in this message. In my opinion, I'm

|> ashamed for British radio amateurs that such a person should appear to be
|> representative of the breed. Makes my flesh crawl, just thinking about it.
|>
|> --
|> Iain Philipps

I think you should realise that, whatever the cause, killing and maiming of innocent civilians can never be justified. Anyone who supports a terrorist organisation, who act in such a manner is just as guilty as if they take part themselves. Bombing a civilian airport can not be justified. The main IRA support comes from the USA, not Ireland. Though I expect only from a small minority, hopefully none of them Amateurs. This is probably what Peter was on about. Before you think of any comments regarding British Government supported terrorism, no I don't support them either, along with 2/3 of the population of the UK. Whatever you believe, never ever believe the press, TV and radio etc, they all give a biased view, some even lie. You have to go and see for yourself, or talk to a representative selection of locals. After all, would you go to Miami airport if they believed the reports we have had in Europe? You get murdered for making a wrong turning or asking directions!

Mike

End of Info-Hams Digest V94 #320

